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BIENNIAL REPORT

1917-1918

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THE UNIVERSITY OF IDAHO.

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THE UNIVERSITY OF IDAHO

REPORT OF THE PRESIDENT

To the Board of Education:

The biennium just closing spans the interval of active participation by the United States in the Great War. The University of Idaho in common with all other institutions of higher learning marshalled its resources so far as possible for the business of war. It contributed an unusually large proportion of its men to Army and Navy. It supplied experts in special lines of war duty. It modified its courses of study. Thru the Reserve Officers' Training Corps, National Army Training Detachment, and Students' Army Training Corps, it functioned as an adjunct of the War Department and the United States Army.

Its extension service of more than a hundred field workers in Idaho has carried forward the war program of increased crop production and the conservation of food supplies. The College of Agriculture and the Agricultural Experiment Station have also done much to stimulate crops and livestock production.

The University School of Mines has conducted an extensive search for the minerals most needed in war. The University School of Forestry has assisted in surveys of lands suitable for returned soldiers. The College of Engineering has been indefatigable in enlisting its graduates and undergraduates in positions of greatest military usefulness. The Department of Home Economics in cooperation with other departments of the University has assisted in the statewide program of the United States Food Administration and also engaged most actively in training young women for the emergencies of the war, including new vocations.

The College of Letters and Science has brought the message of the meaning of the war and of the ideals for which our nation was contending.

In all departments, therefore, the University has done what it could to assist in the winning of the war.

WAR AND EDUCATION

The war has moreover demonstrated the imperative need of higher education. It is not too much to say that the chief victors in the great conflict are science and humane ideals. Both of these stand in necessary and vital relation to the colleges and universities of the country.

The war has been a contest of applied sciences; of engineering, chemistry, geology, meteorology, psychology, et cetera. The enemy threatened for a time to win victory because of her superior mastery of science in relation to war. The Allies began to win preponderance only with the complete mobilization of her scientific men. Early in the

war England acknowledged her weakness in this respect and formulated a comprehensive program of higher education which involves a radical reconstruction and a larger recognition of the service rendered by school and college.

PEACE AND EDUCATION

And now peace comes with its problems of reorganization—problems which can be successfully attacked only by trained men and women.

The war has taught us to think in billions. If civilization was worth billions to preserve, it is worth billions to maintain and improve. Peace must thus claim large sums for the upbuilding of the social order. The cost of a single superdreadnaught would supply additional permanent endowment for the University of Idaho sufficient to enable it to double its present service to the State. Idaho gave generously and easily in a single recent war drive more than she spends in a year on all her institutions of higher learning.

CHANGES IN UNIVERSITY ORGANIZATION

During the present biennium the work of the three divisions of agriculture—the College of Agriculture, the Experiment Station, and the Department of Agricultural Extension—were unified by the appointment of E. J. Iddings as Dean of Agriculture and Director of the Experiment Station. Lee W. Fluharty was appointed Director of Agricultural Extension and the service was expanded, partly as a war measure, until it includes a large staff of specialists, county agricultural agents in each of thirty-one counties, home demonstration agents, and extension of boys' and girls' club work to a membership of more than 10,000.

In recognition of the importance of the mining industry in Idaho there was established, in 1917, a School of Mines, including geology, with Francis A. Thomson as Dean. The importance of forestry was likewise recognized by the establishment of a School of Forestry with Francis G. Miller as Dean.

E. M. Hulme was the same year appointed Dean of the College of Letters and Science, and James J. Gill, Acting Dean of the College of Law. In 1918, M. F. Angell was appointed Director of Vocational Training of Soldiers.

During 1918, also, the Department of Music has been reorganized under the direction of Professor E. O. Bangs. It is proposed to expand this department in response to general demand with a view to providing not only for individual instruction but also developing school and community music. It is anticipated that this department will be largely self-supporting.

Idaho is probably the only State University in America which has not conducted a Summer Session within the last two years. It is generally recognized that a school of university grade open to teachers is an indispensable contribution to public education. The rapid advances

of educational theory and practice during recent years amount almost to a revolution. It is highly important for the development of a right State pride and knowledge of problems peculiar to Idaho that courses of university grade be offered. The expense of such a summer session is slight as compared with the benefits to the individuals and to the State. Therefore, I respectfully urge the re-establishment of the University Summer School.

NATIONAL ARMY TRAINING DETACHMENT—VOCATIONAL TRAINING OF SOLDIERS

In June, 1918, the University was assigned by the War Department a quota of 106 drafted men for vocational training. These men were to be given intensive training for two months in one of the following lines of work: Radio work, auto mechanics, general mechanics, carpentry and blacksmithing. A contingent of the same number was admitted August 15th. In October this quota was increased to 326 and was known as Section B of the Students' Army Training Corps. Of this contingent, 200 were from Idaho and 100 from Wyoming. The larger quota was made possible thru the generous cooperation of the citizens of Moscow and the Idaho Harvester Company, which latter placed their excellent plant at the service of the University.

In addition, the Inland Hospital was placed at the disposal of the University by Dr. W. H. Carithers, and the Elks Temple was assigned by members of that order as a hospital for convalescents during the influenza epidemic.

STUDENTS' ARMY TRAINING CORPS

On October 1st the War Department established a unit of the Students' Army Training Corps, Collegiate Section, at the University, in addition to Section B already mentioned. More than 500 men appeared for physical examination. The students who were inducted were quartered in barracks and fed in a temporary mess hall on the campus. It was purposed thus to train selected men to qualify as officers in the United States Army. The universities and colleges were expected to supply thru the S. A. T. C. the greater number of officers for the enlarged army. The work of the Corps began auspiciously only to be interrupted by an epidemic of influenza and the resulting quarantine. All efforts were immediately directed to the task of caring for the sick and the protection of others from the disease. Before the quarantine was terminated came the armistice, and as a result of the armistice there came on November 26th the order providing for the demobilization of the Students' Army Training Corps.

The effect of the establishment of the Students' Army Training Corps promised to be in many respects most salutary. From every quarter of the State came the demand that adequate provision be made for young soldiers in their own State University. Analysis of attendance shows that every county in Idaho is represented. Mutual ac-

quaintance established in classroom and in barracks will, it is hoped, mean much to the development of the State and its higher life.

THE JEROME J. DAY SCHOLARSHIPS

In 1918 Mr. Jerome J. Day established an annual scholarship of \$1,000, to be awarded to the selected students of Shoshone County who desire to enroll in the School of Mines. A committee consisting of the President of the University, the Commissioner of Education and the Dean of the School of Mines makes the award annually.

THE STUDENT LOAN FUND

The Student Loan Fund, established by the Women's Federated Clubs of Idaho, has now reached approximately the sum of \$7000. The money is loaned without interest to deserving students in order to assist them in securing University training. Many high schools and clubs have subscribed units of \$100.00 to this fund, and \$4,200.00 has been pledged during the last two years. Special acknowledgment should be made to Mrs. M. J. Sweeley, who is President of the Women's Federated Clubs of Idaho, for her untiring service in behalf of this important contribution to higher education.

NEEDS OF UNIVERSITY—SALARY BUDGET

A growing institution obviously has many needs. The foremost need of the University of Idaho, however, is an enlarged salary budget. The chief strength of a University is its men. If the Faculty possesses teaching ability, capacity for research, and distinguished personal qualities, the University will render a mighty contribution to the commonwealth. The following table of comparative salary scales requires little comment.

Table Showing Highest Pay in Various Positions

	Professors	Associate Professors	Assistant Professors	Instructors
University of Montana..	\$3,360.00	.....	\$2,700.00	\$1,600.00
Oregon Agric. College..	3,200.00	\$2,400.00	2,100.00	1,500.00
State Col. of Washington	3,000.00	2,200.00	2,000.00	1,600.00
University of Idaho....	2,500.00	2,000.00	1,800.00	1,400.00

If Idaho is to retain her best men—and surely the best are none too good for the sons and daughters of Idaho—she must provide considerable increase in the appropriation for their maintenance. The normal annual increase for salaries in the past has been about \$15,000.00, but this has not enabled the University to keep pace with neighboring States. It must also be recognized that the remuneration of scholars has in recent years greatly advanced.

NEEDS OF THE UNIVERSITY—EQUIPMENT

The scientist must have tools as well as does the blacksmith and the farmer. Some of this equipment is expensive. It is indispensable,

however, if problems are to be solved and teaching properly conducted. In a word, the equipment multiplies the efficiency of the scholar.

As a result of the reduced expenditures of the last two years many departments are at present greatly handicapped. The requests for equipment budgets represent only such provision as is needed for reasonable maintenance and improvement of resources.

NEEDS OF THE UNIVERSITY—BUILDINGS

Several years ago the Board of Education adopted a ten-year building program as described in the Biennial Report for 1915-16.

I respectfully urge the importance of the above program.

In view of the high cost of building construction at the present time and in recognition also of the greater need for maintenance, the special requests for building are nominal and, it is feared, below what may be necessary for the most favorable development of the work and prestige of the University.

Special attention is called to the division which follows, containing the reports of deans and directors. These reports are a record of gratifying progress and a concrete statement of the most important needs of various divisions of the University.

II. REPORTS OF COLLEGES AND DIVISIONS

Herewith are presented brief summaries of achievement and programs of various divisions of the University as discussed by their respective heads, as follows:

- Dean of the University Faculty.
- Dean of Women.
- Dean of the College of Letters and Science.
- Dean of the College of Agriculture.
- Dean of the College of Engineering.
- Dean of the School of Forestry.
- Acting Dean of the College of Law.
- Dean of the School of Mines.
- Commanding Officer of the Military Department.
- Chairman of the Pre-Medic Committee.
- Director of the Agricultural Experiment Station.
- Director of the Agricultural Extension Department.
- Director of Vocational Training of Soldiers.

DEAN OF THE UNIVERSITY FACULTY

To the President:

The departments of instruction of the University are so grouped that they comprise the following colleges and schools, offering the curricula indicated:

College of Letters and Science—General curricula with majors in commerce, economics and political science, English, French, German, Greek, history, Latin, law, music, philosophy, botany, chemistry, geology, mathematics, physics, and zoology—four years each; a specialized curriculum in home economics, four years; school of education, four years; studies preparatory to medicine, four, three or two years; studies preparatory to law, one or two years.

College of Agriculture—Animal husbandry, dairying, farm crops, horticulture, four years each; school of practical agriculture and household arts, three years; five months each year; practical creamery course, five months.

College of Engineering—Civil, electrical, mechanical, and chemical engineering, four years each.

College of Law—Three-year curriculum.

School of Mines—Four-year curricula in mining engineering, metallurgy, and geology; eight weeks course for prospectors, miners and millmen.

School of Forestry—Four-year curricula in general forestry, forest engineering, and forest grazing; forest rangers' course, three years of five months each.

Attendance

Like all other educational institutions the University has been considerably affected in its attendance since April, 1917, by the war. There were no summer sessions held in 1917 and 1918. During the summer of 1918, however, two contingents of vocational student-soldiers were trained upon the campus, totaling 209 men. For the year 1916-17 the total attendance amounted to 715 and for 1917-18, including the above 209 soldiers, 801. The figures for the first eight weeks of the present college year show an enrollment of 990. Of these no less than 712 are in the Students' Army Training Corps.

Summary of Annual Enrollment, 1916-17 and 1917-18

(Sept. 1, 1916, to Aug. 31, 1917)

(Sept. 1, 1917, to Aug. 31, 1918)

I. By Colleges and Curricula:	1916-17	1917-18
College of Letters and Science.....	406	297
Graduate Students	14	11
B. A. Curriculum	204	178
B. A. (Education) Curriculum.....	8	9
B. S. Curriculum.....	60	45
Music	22	21
Home Economics Curriculum.....	40	33
Forest Curricula	29	*
Night School	18	*
Forest Reserve	11	*

College of Agriculture.....	175	145
Graduate Students	5	*
Four-year Curricula	80	63
Household Arts Curriculum.....	19	19
Five-months Dairy	5	4
School of Practical Agriculture and Household Arts	66	59
College of Engineering.....	72	52
Graduate Students	1	*
Civil Engineering Curriculum.....	12	13
Mining Engineering Curriculum.....	11	*
Miners' Short Course.....	8	*
Electrical Engineering Curriculum.....	19	14
Mechanical Engineering Curriculum.....	10	15
Chemical Engineering Curriculum.....	11	10
College of Law.....	40	25
Graduate Student	1	..
Law Curriculum	39	25
School of Mines.....	*	23
Graduate Students	*	2
Four-year Curriculum	*	12
Miners' Short Course (net).....	*	9
School of Forestry.....	*	50
Four-year Curricula	*	10
Forest Rangers	*	6
Forestry Correspondence Students.....	*	34
Correspondence Students (net).....	22	..
Vocational Students .....	..	209
First Contingent, June 15, 1918.....	100	
Second Contingent, August 15, 1918.....	109	
Totals.....	715	801

II. By Classes:	1916-17	1917-18
Graduate Students	21	13
Seniors	84	49
Juniors	97	90
Sophomores	120	110
Freshmen	203	173
Unclassed	60	45
Special Agricultural Courses.....	71	63
Miners Short Course.....	4	9
Forest Rangers	4	6

* Separate Schools of Mines and Forestry established in 1917-18.

Forestry Correspondence Students.....		34
Correspondence Students	28	
Night School	23	
	<hr/>	<hr/>
Regular Session	715	592
Vocational Students		209
	<hr/>	<hr/>
Totals.....	715	801

TABLE C
Geographical Distribution of Students

	TOTALS		
	1916-17	1917-18	1918-19
		(to Nov. 22)	
Ada	64	50	105
Adams	4	4	5
Bannock	7	17	31
Bear Lake	2	3	5
Benewah	5	6	7
Bingham	5	16	22
Blaine	7	8	6
Boise	4	7	1
Bonner	17	20	19
Bonneville	5	13	14
Boundary	3	4	9
Butte	0	3	3
Camas	0	1	0
Canyon	47	38	63
Cassia	0	11	20
Clearwater	6	11	27
Custer	6	5	6
Elmore	0	6	7
Franklin	1	4	3
Fremont	1	7	9
Gem	10	12	17
Gooding	5	5	13
Idaho	13	14	20
Jefferson	2	5	9
Kootenai	42	35	38
Latah	221	181	122
Lemhi	1	6	9
Lewis	23	19	18
Lincoln	13	12	12
Madison	1	5	3
Minidoka	4	14	22
Nez Perce	20	35	48
Oneida	3	2	6

Owyhee	7	6	4
Payette	0	14	18
Power	3	5	6
Shoshone	17	21	46
Teton	0	2	1
Twin Falls	23	31	50
Valley	0	2	1
Washington	11	13	11
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Total Idaho Students.....	603	673	836
Outside of Idaho.....	112	128	154
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Total	715	801	990

Graduates

One substantial evidence of the growth of the University is afforded by the numbers that are graduated year by year from the various curricula. The total number of degrees conferred to date is 761. Nearly one-half of these have been granted in the last six years. The records of graduation are as follows:

TABLE D

Year	First Bachelor's Degree	Second Bachelor's Degree	Master's Degree	Honorary Degree	Total Degrees
1894 .....	..	..	..	2	2
1896	4	..	..	..	4
1897	5	..	1	..	6
1898	8	..	2	..	10
1899	7	..	..	..	7
1900	10	..	..	..	10
1901	24	..	..	..	24
1902	10	2	..	..	12
1903	31	..	..	..	31
1904	14	..	..	..	14
1905	14	..	..	2	16
1906	29	..	..	..	29
1907	33	1	..	..	34
1908	29	..	..	..	29
1909	40	..	1	..	41
1910	29	1	..	2	31
1911	43	3	2	..	48
1912	42	..	4	..	46
1913	53	1	1	..	55
1914	64	..	3	..	67
1915	59	2	2	..	63
1916	61	2	2	..	65
1917	68	2	1	..	71

1918	42	1	2	..	45
Total	719	15	21	6	761
Deduct for those receiving second degree.....	..	15	11	..	26
	719	0	10	6	735
Net total of Graduates					735
Deceased					24
Living Graduates					712

Summary of Degrees Conferred, 1894-1918

Bachelor's Degrees:

Bachelor of Arts	242
Bachelor of Arts in Education.....	2
Bachelor of Philosophy (discontinued 1899).....	6
Bachelor of Science	118
Bachelor of Music (discontinued 1914).....	17
Bachelor of Science in Home Economics	25
Bachelor of Science in Household Arts	8
Bachelor of Science in Forestry	15
Bachelor of Science in Civil Engineering	62
Bachelor of Science in Mining Engineering	68
Bachelor of Science in Electrical Engineering	30
Bachelor of Science in Mechanical Engineering	4
Bachelor of Science in Chemical Engineering	6
Bachelor of Science in Agriculture	75
Bachelor of Laws	56

734

Advanced Degrees:

Civil Engineer	1
Master of Arts.....	4
Master of Science	10
Master of Science in Mining Engineering.....	1
Master of Science in Agriculture	4
Master of Science in Forestry	1

21

Honorary Degrees:

Master of Arts (honorary).....	1
Doctor of Music	1
Doctor of Divinity	2
Doctor of Laws	2

6

Total Degrees 761

Increase of Work

In conclusion, it should be said that the large increase in students adds greatly to the load upon this office, which is coming more and more to be not only the depository of all scholastic records but also a bureau of general information both for all students and faculty members and for persons outside the University. The Students' Army Training Corps has added a further burden of statistical reports and recording. In view of this multiplicity of service and considering the probable further increase in students during the next biennium, a larger provision should be made both in physical quarters and in clerical assistance.

Respectfully submitted,

J. G. ELDRIDGE,
Dean of the University Faculty.

DEAN OF WOMEN

To the President:

The enrollment of women at the University for 1917 and 1918 was one hundred and ninety-five.

Beginning January first there will be a decided increase in number as many college women engaged in war service will be released.

The scholarship of the women has always been the very best and increased honor has been theirs for these two years.

The University is rapidly providing the State with excellent teachers, county agents, county club leaders and extension workers. These women give splendid evidence of the fine character of work being done here; they are also the incentive to many parents in deciding where to send their boys and girls.

The war over many wounded soldiers will be equipped for much of the service we might have concluded would be required of women, so it would seem that the University must interest and educate women largely in vocations that will remain the vocations of women.

There will be immediate demands for social workers, community recreation workers, community health workers and family rehabilitation workers. In preparation for such special service the largest opportunities for musical, dramatic, artistic and physical education must be afforded.

To the Department of Home Economics has been added an instructor in art, equipping the department for the fullest and best training.

Excellent work will be done in music but there should be increased advantages in this department.

In response to the public demand for secretarial work by well educated women the University has made provision in connection with the Department of Economics for the necessary preliminary training.

If the department of physical training is to offer more than just required work, there should be an assistant employed.

If we look forward we must contemplate the advantages that will accrue to women when they have a building where all is especially "woman's work" can be assembled.

Respectfully submitted,

PERMEAL FRENCH,

Dean of Women.

DEAN OF THE COLLEGE OF LETTERS AND SCIENCE

To the President:

In the last two years (1917-18) the College of Letters and Science has gone about its work in a quiet and business-like manner. There have been the usual number of changes in the faculty caused by resignations, promotions, and additions. One department, that of Forestry, has been taken from the College and established as a separate School; and another, that of Geology, has been transferred to the newly established School of Mines.

The work of the College has been changed this year (1918-19) to meet the requirements of the Students' Army Training Corps; and it may possibly remain in the present condition, or one somewhat like it, for another year; but we ought to lose no time in looking forward to conditions as they will exist after the conclusion of peace. No one can say with precision what those conditions will be but two new conditions seem quite probable. It seems that there will be, in the first place, a larger number of students in the University than ever before. This increase will be caused by (1) the return of men from military service, and of women from teaching and other work, whose college careers have been interrupted; (2) the addition to the ordinary annual influx of high school graduates of men who went into teaching and other work, who intended in the first place to get a college education; (3) the continuance of college work by men now in college who came to us only because of membership in the Students' Army Training Corps and who now see the advantages of a college education; and (4) the men who in ordinary times would not have come to college but who now have been brought to a decision to get a college education by the widespread change in social ideals caused by the war. The first new condition, then, seems to be that we shall have to face a considerable increase of numbers.

The second new condition that will confront us in the immediate future will be improvements in the various curricula, and in methods of instruction and study. It seems inevitable that college work will be vitalized, that it will be brought into closer and more effective relation with life than ever before.

One thing we can do to prepare for these changes is to provide more buildings and increase our equipment. We have already reached the point, so the present writer is firmly convinced, when we should begin work upon a great library building. That building, the several sections of which can be built only one at a time, should contain a

stack-room large enough to meet our needs for the next generation; a study room capable of seating at least eight hundred students; an auditorium that will accommodate five hundred students, fitted up for lectures, lantern talks, and concerts; many small individual offices; and lecture rooms of various sizes.

The one thing in the matter of equipment that the present writer desires to emphasize is an adequate appropriation for the library. Never in the entire history of the University has the appropriation for the library been as large as it should have been; and in every instance in which the administrative officials deemed it necessary to curtail our expenditures the library has been the first to suffer.

The following table shows the number of our four-year college students arranged according to colleges, the number of all those who may be justly regarded as genuine college students. It will be seen that the students in the College of Letters and Science exceed in number those in all other colleges combined.

	1915-16	1916-17	1917-18	Oct. 26 1918
Letters and Science.....	334	355	276	378
Agriculture	81	64	82	109
Engineering	63	64	52	123
Law	34	40	25	11
School of Mines.....	...	...	14	21
School of Forestry.....	...	...	10	33
Total	512	563	459	675

The professional colleges make direct use of the library for their own special purposes to a considerable extent, and their students depend very largely upon the library in many of the foundational courses given in the College of Letters and Science. But the library, important as it is for the professional colleges, is the very soul of the College of Letters and Science. In it the life of the modern university finds its center. All the interests of the campus, however separate and diverse they may be, find in it their single and indispensable meeting place. And this central position of the library will become more evident in the near future. One of the finest things in the program of the British Labor Party is the demand for the education of the mass of the people not only in mechanical skill and professional knowledge but also in the fulness of life, in what only too many of us have been ready to relegate to a distinctly subordinate position as mere culture. If we are to profit to the fullest possible extent by the tremendous ordeal thru which civilization is now passing, we must have easily accessible the recorded experience of all the nations for our information and guidance, and we can have this experience in no place other than the library. For these reasons the present writer urges, with all the emphasis at his command, that the coming legisla-

ture be asked for an appropriation for the library at least twice as large as any single appropriation that has been made for it in the past.

Respectfully submitted,

EDWARD M. HULME,

Dean, College of Letters and Science.

DEAN OF THE COLLEGE OF AGRICULTURE

To the President:

The work of the Agricultural College during the past two years has been largely affected by war activities. The biennium was started with the heaviest enrollment in the history of the college. Upper classmen began to leave soon after the declaration of war. A large proportion of the student body requested leave in April and May to either enter military service or to work on the farm in response to the call for increased food production.

The Sophomore, Junior, and Senior classes were reduced materially early in the school year of 1917-18, and by the end of the year few upper classmen remained. The farm labor situation became serious, and about one-half of the Freshmen, nearly all of whom were under 21 years of age, were given a speeded-up course in order that they might be released early in April for farm work.

The late opening of 1918, October first, is thought to have had a favorable effect upon attendance. The enrollment to date is 84 per cent Freshmen, due to the absence of upper classmen who have volunteered or been inducted into service and due to a Freshman class 180 per cent larger than in any former year.

Faculty Changes

There have been some marked changes in the teaching force, due to voluntary enlistment or drafting of instructors, and due to resignations for other causes. As it seemed probable that there would be this year but few upper classmen, a saving in the expense of the teaching personnel was made by leaving unfilled vacancies as follows: Instructor in Veterinary Science, Creameryman, Instructor in Dairy Production, Associate in Agricultural Chemistry, and Instructor in Horticulture. Several men have devoted a portion of their time to Extension. One man in soils has been placed on half time Extension. Others who have had light or no teaching duties as a result of the war situation have devoted a greater share of attention to investigation.

During the biennium there have been 14 resignations and 13 new appointments. Four men have been granted leave of absence to enter military service.

The first graduate in Agriculture was in 1901. There were no more graduates until 1909, and by far the larger number have been graduated in Agriculture since 1910. Of the total number of men

who hold either the Bachelor of Science or Master of Science degree in Agriculture from the institution, 44 per cent are now in the military and naval service of the United States, the larger number holding commissions and positions of honor and responsibility. Several men prior to entering military service, or men who have remained in professional lines of work during the war, have been advanced to important positions in technical work in Agriculture. Of the total number of graduates, 25 per cent are in college, state, or federal work of a technical nature.

New Buildings and Improvements

Improvements made in the past two years add measurably to the class, laboratory, and other facilities of the College of Agriculture. The Dairy Building was constructed late in 1917, and is a substantial three-story structure, containing six thousand square feet of floor space. The entire building is devoted to the Department of Dairying, giving excellent facilities for carrying on this most important work. The space in Morrill Hall released by the removal of the Dairy offices, testing laboratories, and the creamery, has been utilized in providing additional storage for publications, office room for the Dean and Director, in giving excellent laboratory and storage rooms for Farm Crops, a nitrogen laboratory for Soils work, and an office for the Assistant County Agent Leader, in charge of the work in northern Idaho, and for the District Home Demonstration Agent, located at Moscow. The new provisions for Farm Crops have released the space on the third floor, which will give much better accommodations for the School of Forestry.

For several years shelter has not been available for properly caring for the large and valuable live stock herds of the University. Three new barns were erected during the summer and fall of 1917. The new horse barn, 40 by 112 feet, is a substantial and thoroughly modern structure, admirably planned for convenience and efficiency in handling the University pure bred and grade horses. The sheep barn is 32 by 88 feet, with storage overhead in a part of the total length for hay and grain, providing a herdsman's room and having exercise lots in connection. The new barn for swine is 28 by 96 feet, and provides 21 pens, feed and tool room. It has exercise lots in connection with each pen. Additional improvements are 1100 rods of fencing, new gates, and a concrete silo, 10 by 42, for the Department of Dairying.

Teachers Training

In 1918 the terms of the Smith-Hughes bill were met by the State Board of Education. A four-year course for training teachers of Agriculture was outlined, and has been formally approved by the Federal Board for Vocational Education. The first two years the new curriculum is the same as required of all Freshmen and Sophomores in Agriculture. The Junior and Senior years are largely elec-

time within certain clearly defined limits. Comments on the plan proposed in Idaho in meeting the needs for teacher training in Agriculture have been quite favorable. With the coming of peace there will no doubt be a call for a large number of trained men for work in high schools that are assisted by the Smith-Hughes fund, and the teacher training work here should develop rapidly with the return of a normal student body.

School of Practical Agriculture

The legislation enacted by Congress during the summer, extending the draft ages, had a marked effect upon attendance in the School of Practical Agriculture. The registration showed a slight decrease in 1917-18, due probably to the very great need of men on the farm. The call for younger men in the fall of this year resulted in a loss of two-thirds of the normal enrollment in the School. This is not surprising, not only on account of the call for military service, but because of unusual demands for labor, which would naturally affect most quickly the class of enterprising young men who make up the normal enrollment in the short courses in Agriculture.

NEEDS

Instructional Facilities

The present teaching force is less than that employed at the end of the previous biennium, due to reasons previously set forth. Former strength must be attained, however, as soon as student conditions justify, and in addition the salary estimates provide for certain new appointments that will offer the student body the best facilities in the history of the Agricultural College. Already evidences are at hand of the return of students, and it is felt that we can reasonably expect a larger attendance than in former years.

A portion of the increased call for salaries and expense is for Agricultural Engineering. Professor John C. Wooley of that Department has done notable work in directing the training of enlisted men in auto mechanics, his present class consisting of 150 men in the vocational section. There has been a strong demand for work in motors in the collegiate section and he now has a five credit course with 25 men enrolled. In order to make his Department more useful, he is offering this winter a two weeks' short course in Tractors. We have never fully measured up to our responsibilities and our opportunities in the field of Irrigation. This is one of the lines of work that must be given a prominent place in our program. There will be found in the budget submitted a definite request for the employment of a man who is trained in Agricultural Engineering, with special reference to Irrigation. His functions should be both instructional and investigational. The addition of this work in the Department of Agricultural Engineering is of the very greatest importance in connection with properly serving the educational needs of Idaho.

There is a request for increased funds for the support of the Department of Farm Crops, including the employment of a man for Farm Management. One of Idaho's greatest businesses is that of crop production. So far, we have given little attention to a related line of work of very great importance, namely, Farm Management. This has to do largely with the economic side of Agriculture. There is more and more call for information along this line, and there is a widespread feeling among farmers that the College should give more attention to this very important phase of Agriculture.

Improvements and Upkeep

There is a request for \$3000 for the cost of fencing, painting, upkeep, and minor improvements on the University Farm. This item includes the painting of the beef cattle barn, the staining of the dairy cattle barn, the painting of five residences, poultry houses, the horticultural barn, mill, tool house, and by-products building. Other details of this request contemplate fencing, a concrete manure pit at the horse barn and one at the dairy cattle barn, gates, repairing of judging pavilion, placing of signs at entrances to the farm and on the buildings, repair and upkeep of houses and barns, and a truck for general use about the farm.

The Department of Poultry Husbandry has been in need of additional room for housing poultry, for proper feed storage, and a place in which student judging and other practical work may be done. The estimated cost is \$2500.

In constructing the Dairy Building there did not seem to be sufficient funds to place a suitable floor for the second story. This floor is used for butter making and other dairy practices, and must of necessity be water tight and of such nature that it can be kept scrupulously clean. The present floor is not at all satisfactory. A floor of tiling is suggested, which, together with other minor improvements, will cost approximately \$1500.

In addition to the above there is requested \$1000 for contingent and emergency.

SERVICE AND LEADERSHIP

The total requests are larger than for former years for two reasons. First, it is absolutely necessary to pay higher salaries, if Idaho is to retain strong men for her work. The total proposed salary increase for the coming biennium, as compared with the salaries in effect at the beginning of the present biennium, is \$16,000. Second, it is proposed to strengthen certain departments and to offer new lines of work that will enable us to render more effective service than ever before to young men interested in securing agricultural training and to the State as a whole.

Technical leadership is the greatest single contribution that the Agricultural College can make to Idaho. The emphasis, therefore,

in the coming biennium, should be placed on men, that each department may have at least one trained and experienced man upon whom the farmers of Idaho and the young men of the State may confidently depend for leadership.

Respectfully submitted,

E. J. IDDINGS,
Dean and Director.

DEAN OF THE COLLEGE OF ENGINEERING

To the President:

The Engineering College as now organized offers thoro and well considered curricula in the fields of Civil, Electrical, Mechanical and Chemical Engineering. The great war in which we have been engaged has directed attention to the outstanding place of these professions not alone in modern warfare but as well in the work of reconstruction which must make good the wastes of war.

The young men of Idaho clearly recognize the opportunity thus presented to the man with engineering training. In the registration of Freshmen at the University this fall, an even one hundred registered in one of the four courses mentioned above. While a number of these did not remain at the University because they failed to pass the physical examination and, therefore, could not be admitted to the S. A. T. C. or else changed their courses of study because they quickly realized that their preparation was insufficient to enable them to go on successfully with the engineering work, nevertheless such a registration makes plain that approximately one out of five of the men coming to the University of Idaho desire to prepare for engineering work.

During the past year the college has been fortunate in having the Board of Education construct for it an Engineering Shop building 56 by 108 feet. This is a one-story brick structure immediately behind the Engineering Building. While primarily built for the shop, it will furnish needed space for expansion of the laboratories of the Engineering College as well as for the University Department of Chemistry. The transference to the new building of the wood and machine shops puts an end to the annoyance heretofore suffered from vibrations in the main Engineering Building.

Under the inspiration of instructions from the Education Committee of the General Government received early in September, the work of the Engineering College was transformed into a condensed and speeded up course of two years of forty-eight weeks each, providing, in addition to academic work, for a total of eleven hours per week of drill and military instruction in each of the first two quarters and six hours per week of such work in each quarter thereafter. The principle guiding the construction of the new curricula was to retain the fundamental work common to the four fields and that especially important in each, and to cut down or out the applied

courses in each field. The plan contemplated giving in the new curricula about seventy per cent of the work hitherto given in the former four-year curricula. The maintenance of these courses will be conditioned on the continuance of the war.

The Electrical Engineering Department finds itself under the necessity of replacing a part of its apparatus, now out of date, with current types of apparatus. There is need also for considerable expenditure for thoro repair of other apparatus either altogether out of commission or working inefficiently.

The work of the Mechanical Engineering Department for the immediate future will be in the direction of assembling and installing in the new quarters provided, equipment already procured and supplementing this with such additional equipment as shall be necessary to round out what we now have and provide for a complete course in experimental mechanical engineering work.

For the enlargement of shop equipment, \$1775 is asked. It should be remembered that the engineering shops respond to important claims upon them from the short course and four-year curricula in Agriculture.

The war has clearly revealed the large importance of the chemical industries, an importance which will hardly be lessened with the coming of peace. I am glad to renew my endorsement of the request made two years ago by the head of the Chemical Department for an appropriation to equip and maintain for the biennium, a laboratory for Industrial Chemistry. The amount asked for this purpose is \$3000.

I wish also to renew the recommendation made two years ago that a road materials laboratory be provided in the Civil Engineering Department. According to a statement prepared by the management branch of the Federal Office of Public Roads, the expenditures for 1917 on roads and bridges under the supervision of the State Highway Department of Idaho was \$842,723. For the same year, local road and bridge expenditures in Idaho were estimated by the same authority to amount to \$1,250,000.

In the August number of the magazine published by the Office of Public Roads will be found the statement that during the single month of June, 1918, project agreements between the Federal Government and the State of Idaho were either approved or executed, calling for the expenditure of \$701,577 on roads and bridges in three counties of the State. I cite these figures to indicate the present magnitude of expenditure for road construction in Idaho, an expenditure which must inevitably largely increase with the coming of peace. On August 22, 1917, L. I. Hewes, District Engineer in charge of the administration of the Federal Aid Road Act for Idaho and the adjacent territory, wrote me as follows:

"It will probably be necessary in the near future for this district office to make arrangements for tests of road materials to be used on roads assisted by federal aid in the State of Idaho. Hoping that you have a laboratory adequate for such

- a purpose or that you will have one soon, I am

Very respectfully,

L. I. HEWES,
District Engineer."

The amount desired to fully equip and maintain for two years an adequate road materials laboratory is \$3500. It is manifest without extended argument that such a laboratory might easily save to the State many times its cost in the first year of its existence.

Respectfully submitted,

C. N. LITTLE,
Dean, College of Engineering.

DEAN OF THE SCHOOL OF FORESTRY

To the President:

The event of greatest importance affecting the School of Forestry the past biennium was the organization of the School, in August, 1917, as an independent division, thus placing forestry on a par with agriculture and mining. This action was taken by the University authorities in recognition of the importance of the lumber industry in Idaho, and of the vital part forestry in general plays in the everyday life of the State.

Due to the heavy inroads made on the student body by the war, the School in common with all other forest schools in the country, suffered in the matter of attendance in the year 1917-18, but it has rallied again this year and now has a record enrollment, the number majoring in forestry the first quarter of 1918-19 representing an increase of fourteen per cent over that of any previous year. The School also has a registration of fifty in a correspondence course entitled "Lumber and Its Uses." The course was first announced about a year ago, and it has met with popular favor from the start. The registrants represent twenty-eight states.

Within the biennium the School has published thru the Experiment Station Bulletin 105, *Trees—What, Where, When, and How to Plant*; and Circulars 4 and 5, both dealing with forest trees suitable for planting in Idaho. There was also issued in 1917 by the faculty and students the *Idaho Forester*, a semi-technical publication, which it is hoped will become an annual after the close of the war. Numerous popular articles were contributed to the press, and approximately two thousand letters were written in answer to inquiries concerning forestry matters. Many of these letters involved the making of plans for windbreak, woodlot, and street or park plantings. The plan of distributing forest and shade trees at cost was continued, and in spite

of war conditions the sales the past year exceeded those of any previous year by nearly forty per cent.

A series of experiments was started in cooperation with the School of Mines, to determine the practicability of extracting oils from commercial woods of Idaho for ore flotation. The yield in gallons per cord, and the cost per gallon were determined for six leading species. Altho it is too early to draw final conclusions, the experiments thus far conducted are encouraging.

In response to a demand for foresters especially trained in the subject, the School announced in 1917 a new four-year curriculum in forest grazing. This course has excellent possibilities.

In cooperation with the Department of the Interior the School is now making a survey of the logged-off lands in Idaho with particular reference to State owned lands. This investigation looks forward to the providing of homes for returned soldiers. A preliminary report has already been submitted.

NEEDS

The last biennium, due to war conditions, has properly been one of retrenchment. Returning as we are to a peace basis, it seems proper to gage the budget for the coming biennium on that of the biennium of 1915-16 when conditions were normal. Therefore, the budget requested for the next two years is equal to the actual expenditures for the year period of 1915-16, with about ten per cent added to provide for reasonable expansion.

Mr. H. E. Schmelter, instructor in forestry, resigned last June to enter the U. S. Army, and request is made that his place be filled at the beginning of the coming year. The grazing problem has an exceedingly important bearing on the question of forestry in Idaho, and the School should be in position to make such studies, within its field, as will enable it to take its rightful place in the development of the grazing industry of the State. It is requested, therefore, that a forester especially trained in grazing matters be added the second year.

The School is in great need of more field and laboratory equipment, and it is hoped that the budget requested for this purpose can be allowed.

Before the School of Forestry can come into its own, and render the service that the state has a right to expect, it must have greatly increased quarters. It is temporarily housed on the third floor of Morrill Hall where quarters as adequate as the College of Agriculture can spare are provided. But the School needs more class room and laboratory space, besides a large display room for a forest museum. One of the greatest needs is that of a well equipped forest products laboratory, the purpose of which would be to make detailed studies of the physical and mechanical properties of wood, adaptability of different species for different uses, such as paper pulp, and wood distillates; also experiments in the preservative treatment of timbers to prolong

durability, methods of kiln drying lumber, and investigations of the many other problems so important to the timber interests of the State. It is the hope, therefore, that the School will not have to wait long for adequate quarters of its own.

As soon as it can be brought about, a portion of the University timber lands should be set aside for the use of the School as a demonstration forest, where experiments in the treatment and care of forest lands could be conducted. Such a forest would stand in the same relation to forestry that the agricultural experiment station stands to agriculture, and in time would furnish reliable data for the solution of the various problems met with in perpetuating timber production.

Respectfully submitted,

F. G. MILLER,
Dean, School of Forestry.

ACTING DEAN OF THE COLLEGE OF LAW

To the President:

The first few months of the present biennium found the College of Law enjoying normal conditions. Forty-two students were enrolled and pursuing the regular law course. In the spring of 1917 the nation was forced to declare that a state of war then existed between the United States and the Imperial German Government. All law students immediately expressed a desire to participate in the struggle and the entire class of 1917 offered itself to the Government. Every man enlisted save one who, because of physical unfitness, was unable to qualify. The members of all other law classes exhibited a like spirit and out of a total enrollment of forty-two, thirty-nine are now known to be in the military service of the nation, a very high percentage of them being commissioned officers.

Notwithstanding war conditions, the college opened in the fall of 1917 with an enrollment of twenty-five students pursuing full law courses. During the year, thirty students enrolled in other colleges and departments of the University and carried one or more courses in the College of Law. While the reduction in registration was marked, the percentage is less than the loss experienced by the average law school of the country maintaining like standards.

The opening of work in October, 1918, found us with a large attendance of members of the Students' Army Training Corps. More than two hundred twenty-five men are now pursuing courses of study in military law and other law subjects.

With the close of the war apparently at hand, we may confidently look forward to the resumption of the work under normal conditions during the coming biennium. The writer is of opinion that the number of instructors employed during the first year of the present biennium will be sufficient to discharge all urgent demands of the college during the coming two years.

With a view to meeting more fully the conditions prevailing in the Northwest, the law curriculum was revised by the faculty in the spring of 1918. The school offers a thoro and well balanced course of studies, well calculated to fit students for the practice of law in the North-western portion of the United States.

While the law library is growing and is a well selected library, it is highly desirable to add at least five hundred volumes at the earliest possible moment. The writer is informed that a considerable number of unused standard law books are now stored in the Supreme Court Library at Lewiston, Idaho. These books, under existing laws, are to be kept at Lewiston under rules and regulations prescribed by the Justices of the Supreme Court. Would it not be well to have the present statute relating to the custody of such books so modified as to permit unused books belonging to the above mentioned library to be kept in the law library of the University of Idaho? They should be kept in a separate section and be so accessioned as to permit a recall by the Justices at any time such action should seem desirable. While in the library here they would be as well guarded as they now are and they would at the same time be serving a useful purpose.

Respectfully submitted,

JAMES J. GILL,
Acting Dean, College of Law.

DEAN OF THE SCHOOL OF MINES

To the President:

The war has interfered seriously with routine instructional work. Practically all of the upper classmen were gone by the fall semester of 1917 but in spite of this the School of Mines registered the largest freshman class for many years, so that the total enrollment in mining for 1917 was larger than it had been since 1911. With the formation of the S. A. T. C. the freshman class again shows an increase and many of the sophomores have returned to college. The enrollment in Geology both for technical and general science value has been satisfactory and gratifying. Distinct curricula in Geology, Mining, and Metallurgy have been provided, with a common freshman year.

A gratifying feature of the year has been the establishment by Mr. Jerome J. Day of an annual scholarship of \$250 tenable for four years, awarded to the selected student of Shoshone County, who desires to enroll in the School of Mines. Altogether the prospect for growth in number of mining students is satisfactory, altho as yet the number is far below that commensurate with the needs and importance of the mining industry in the State.

The Mining Short Course last winter had an excellent session, the number being larger than for many years and the quality of students being exceptionally good. Comparable in some respects with the short-course work is a somewhat popularized correspondence course in the generalities of the mineral industry which it is hoped we may soon be able to offer.

Mention should be made of the S. A. T. C. class in Military Surveying and Mapmaking which has been administered by the School of Mines with the assistance of Professor Cook of the School of Forestry and Professor Collier of the Department of Civil Engineering.

Over one hundred students have been enrolled in this course, and the School of Mines is glad to have been of national service in initiating this course at the University.

In passing, mention might be made of the Traveling Vocational or Mining Trade School which is shortly to be inaugurated under the provisions of the Smith-Hughes Act, the work of which will be under the general direction of the School of Mines.

METALLURGICAL RESEARCH

Due to the generous interest of the mine owners of the State, it has been possible for the University to establish and maintain co-operative relations with the U. S. Bureau of Mines in metallurgical work.

While the war situation has made it extremely difficult to secure research-fellows, progress has been made.

Problems under investigation include:

(1) Differential Flotation, with especial reference to the zinc-lead ores of the Coeur d'Alenes.

(2) Availability of western wood-oils for flotation concentration.

(3) Treatment of the complex gold-silver ores of southern Idaho.

On the first project definite results are being obtained, and it is expected shortly that application to mill operation will be made of the methods developed in the School of Mines laboratories under the able guidance of Mr. C. A. Wright, the Bureau's representative, assisted by Mr. J. G. Parmalee who has been a most indefatigable research-fellow. The continuance of this work is a burden which properly belongs to the State and not to the individual mine operators and a request is being made elsewhere for the presentation of this matter, through the Board to the legislature.

Another important feature of the cooperative work has been the preparation of a bulletin now in the printer's hands dealing in a general way with the mining districts and mineral industry of the entire State. This publication will be of much utility to all persons concerned in the State's mineral development.

GEOLOGICAL SURVEY

After plans had been made for other work it was decided late in the spring of the current year to make the major effort of the Geological Survey, for which an appropriation of \$4000 had been provided, an examination of the war-mineral resources of the State. Professor Livingston, assisted in some small measure by the writer, spent a strenuous summer and covered practically all known deposits of tungsten, molybdenum, manganese, mercury, antimony and lesser

war minerals in the State. The detailed results of this work will shortly be available in the form of a bulletin which should be of considerable value in directing attention to certain resources of the State hitherto neglected.

In addition between two and three thousand mineral specimens have been determined, and several hundred assays and analyses of rocks and minerals made.

In general and in conclusion, Mr. President, I would like to say that it is the desire of the School of Mines, first of all to turn out a sufficient supply of young men soundly and thoroly trained in the technique and art of the various phases of the mining industry, who shall be at the same time good citizens and constructive forces in the isolated communities where they are most likely to be called upon to serve; and secondly, to make its equipment, in personnel and material, available for the advancement and assistance of the mineral industry of the State which bids fair to be one of the commanding resources of Idaho for many years to come.

Respectfully submitted,

F. A. THOMSON,
Dean, School of Mines.

COMMANDING OFFICER OF THE MILITARY DEPARTMENT

To the President:

Upon my entrance to duties here I found the Military Department in excellent condition as the result of the efficient administration of Captain A. D. Cummings, who was Commandant during the academic year 1916-17. The report of the inspecting officer who inspected the cadet battalion April 28, 1917, was very favorable. The more stringent system of discipline inaugurated showed beneficial results. A Senior Unit of the Reserve Officers' Training Corps had been established during February, 1917. The week's encampment held at Fort George Wright was successfully carried out. The intensive work given served to increase greatly the cadets' interest in military affairs.

During the year 1917-18 instruction in grenade throwing, bayonet combat, military sketching, map problems, and advance guard and work on the relief map were added to the regular military course. The extra equipment purchased for the department, consisting of maps, sand table and sets, relief map, sketching boards with compasses and tripods stimulated interest on the part of the students and widened the range of instruction. The total registration in the Military Department for the year 1917-18 reached the gratifying figure of 221.

A matter of keen satisfaction to the military staff and a source of pride to the entire institution is the record made by the University of Idaho cadets in the various officers' training camps. Up to April, 1918, 322 cadets of the University battalion had entered the military service of the United States. Many more have entered since this date. Well over 95% of our men sent to officers' training camps were suc-

cessful in gaining commissions. These were all sent before the unit of the S. A. T. C. was established here October 1, 1918. Since that date and before the influenza quarantine went into effect 35 members of the S. A. T. C. have been sent. The armistice has since resulted in the closing of the officers' training camps.

Continuous improvement in the Military department of the University of Idaho was noted by the inspector at the annual inspection held April 20, 1918. "Good discipline, military appearance and satisfactory condition of all things military at the institution" were noted. The Military department of the University of Idaho, as the result of this inspection, was placed at the head of the list of institutions in its class in the Western Department.

Students' Army Training Corps

With the establishment of the S. A. T. C. the University in general and the Military department in particular had to face new problems of administration, discipline, quarters and subsistence, and a very burdensome increase in the amount of clerical and paper work. The influenza epidemic and the unusually long quarantine enforced on the students further complicated matters. With the exception of the Commandant and 1st Sergeant Wm. H. Abendroth the officer personnel was entirely new. Comparatively few of our old men were able to return to act as non-commissioned officers because of the draft situation. The spirit of helpful cooperation, however, has everywhere been excellent and the new officers have proven themselves to be very willing and capable workers. So much so indeed that we hope fully to maintain the good record of the Military department of the University of Idaho. In particular, I wish to mention the prompt, energetic and effective measures taken by 1st Lieut. F. J. Kotalik, the surgeon in charge.

The Vocational Training Detachment has been made a part of the S. A. T. C. and is designated Section B. The Collegiate Section is designated Section A. The total enrollment on November 1, 1918, in the S. A. T. C. was 382 in Section A, and 295 in Section B.

October 17, 1918, 300 members of Section B arrived at the University and brought the influenza with them. Some were ill when they arrived. The epidemic later spread to Section A. Altogether we have had 191 cases of influenza in the S. A. T. C., 91 in Section A and 100 in Section B. Two deaths occurred in Section A and ten in Section B. The last case was admitted to the hospital November 14.

November 26th a telegram was received from the War Department ordering the demobilization of both sections of the S. A. T. C. Demobilization and discharge of Section B is to begin December 2, and that of Section A is to begin December 4. The discharge of officers is to proceed beginning with December 10. This applies to all officers who do not desire to remain permanently in the service. The demobilization order is directed to all S. A. T. C. institutions in the country. As mentioned above there is already established at the University a

Senior Unit of the R. O. T. C. At the completion of the demobilization, about December 21, the Military department will revert to the R. O. T. C. status, under which we have operated from February, 1917. to the beginning of the present term.

Respectfully submitted

LUTHER FELKER,

Captain U. S. Army.

CHAIRMAN OF PRE-MEDIC COMMITTEE

To the President:

The increase, within the past three years, in the number of students taking up pre-medical training at the University is most encouraging. Forty-two enthusiastic students are taking advantage of the pre-medical work offered this year as compared with twenty-nine in 1917-18, twenty-six in 1916-17, seventeen in 1915-16, eleven in 1914-15, and six in 1913-14. This substantial increase in the number of students has prompted the recent adoption of a definite four year curriculum leading to a B. S. Pre-Medical Degree.

The great advances of recent years in all the natural sciences have led to correspondingly great advances in the practice of medicine and surgery. In full realization of this fact, our foundational curriculum was made as broad and strong as may be had anywhere, and meets the entrance requirements of every medical school in the country. The work is so outlined that the student can arrange for four, three, or two years of work, according to the nature of the entrance requirements of the institution which he contemplates entering.

According to reports, our former students are doing exceptionally good work at several of the strongest medical schools. Idaho has every reason to feel proud of the high standing accorded her pre-medical work by some of the leading medical institutions. The recognition given us by some of the best schools is most flattering. Rush, for example, gives our B. S. Pre-medical graduates advanced credit in such courses as Comparative Anatomy, Embryology, Histology and Organology, Heredity and Eugenics, Evolution, Cytology, and Biological Chemistry, equivalent to one year of medical work at that institution. A better recognition could not be expected by any school.

There is every indication that the increase in enrollment in this department of work will, in the near future, be even greater than it has been in the past two or three years, and the need of the first two years of medical work here for the financial benefit of the large number of students is obvious.

Respectfully submitted,

J. E. WODSEDALEK,

Chairman of Committee on Pre-medical Instruction.

DIRECTOR OF THE AGRICULTURAL EXPERIMENT STATION*To the President:*

The past two years have meant for progress in the work of the Agricultural Experiment Station. Certain important lines of investigation have been completed and results published or now ready for publication. New experimental projects have been undertaken; an additional sub-station farm has been definitely located and development work started; station results have played an important part in the increased production and conservation work of the past 18 months; station workers have rendered valuable service in the American Army, in the Red Cross, in various drives for funds, and in many minor fields of war activity.

Until June 12th of this year the station work was under the administrative charge of J. S. Jones.

Station Activities State Wide

The activities of the Experiment Station extend to many parts of the State. The central station farm at Moscow consists of 375 acres of leased and deeded land; the Caldwell Substation, 320 acres; the Aberdeen Station, 80 acres; the High Altitude Station at Felt, 160 acres of dry farm land and 40 acres of irrigated land; the Experimental Farm at Sandpoint, 170 acres. In addition to the above it is hoped to have active participation in the work of the 40-acre, well improved Experimental Farm at Jerome. Another point from which station work is conducted is the Entomological Substation at Twin Falls, where Mr. R. H. Smith is located for work with clover aphids. The Experiment Station, therefore, is statewide in its work and influence, and has to do with the problems of the State's agricultural development and prosperity.

Federal Support

With the exception of the Substation Farms and small appropriations for soil survey and insect pest investigation, the work of the Experiment Station is supported by the two federal funds, Hatch and Adams. Under the Hatch Act, 31 projects for separate pieces of work are supported, while nine projects are supported by the Adams Fund. Twelve separate projects carried on by members of the Station staff derive their support from such special appropriations as mentioned above, or are conducted during spare time by men who are on the instructional payroll of the University.

Hatch Fund Projects*Animal Husbandry*

1. A study of the leading breeds of sheep with special reference to the factors influencing production.
2. The growing and use of silage crops other than corn for feeding beef cattle and sheep.

3. Hogging off field peas.
4. Forage crops for swine.
5. Economical rations for finishing swine.
6. Economical rations for finishing lambs.

Chemistry

1. Silage investigations.
 - (a) The acidity of silage made from sunflowers, beet-tops and artichoke tops.
 - (b) Digestion coefficients of sunflower and beet-top silage.
2. The ash of irrigated and non-irrigated fruits.

Dairying

1. Experiments to find relation between barley and corn meal in the ration for dairy cattle of the northwest.

Farm Crops

1. Variety tests, selection and breeding of small grains.
2. Winter barley culture.
3. Forage crops—culture and improvement.
4. Variety tests, selection and improvement of field peas.
5. Cultural experiments with field peas.
6. Variety tests, selection and improvement of field beans.
7. Cultural experiments with field beans.
8. Corn breeding.
9. Root crops—culture and seed production.
10. Questionnaire on field peas.

Horticulture

1. Summer vs. winter pruning experiments.
2. Small fruits experiment.
3. Variety tests of vegetables.
4. Strawberry variety tests.
5. Apple variety tests.
6. Potato experiments.
7. Experiments with tomatoes.
8. Experiments with cabbage.
9. Experiments with garden beans.

Poultry Husbandry

1. Feeding for egg production.
2. Flock management.

Soils

1. Crop rotation and fertilization (Moscow and Sandpoint).

Adams Fund Projects

Bacteriology

1. The influence of various woods on bacterial activity in the soil.
2. The relation of nitrates to nodule formation.

Chemistry

1. Factors influencing the protein content of wheat.
 - (a) Correlation of available soil in nitrogen and the protein content of wheat.
 - (b) Baking studies on types of Idaho wheats.
2. Factors influencing the ripening of fruits, particularly apples.

Dairying

1. A study of the type of organisms present and multiplying in cottage cheese.

Horticulture

1. Apple breeding.

Soils

1. Duty of water.
2. Alkali investigations.

Zoology

1. Cytological studies
 - (a) Additional cytological studies of the reproductive cells of the mule.
 - (b) Cytological studies of the reproductive cells of cattle.
 - (c) Cytological studies of the reproductive cells of sheep.

**Projects Supported by University Maintenance Funds or Special
State Appropriations**

Agricultural Engineering

1. Farm sewage disposal.

Bacteriology

1. Commercial preparation of culture for the inoculation of nitrogen-gathering bacteria.

Forestry

1. Forest by-products.
2. Experimental tree planting.
3. Grazing studies.

Poultry Husbandry

1. Poultry house construction.

Pure Seed

1. Field work.

Field visitation, encouragement of crop diversification, assistance in marketing of seeds, development of seed growers' associations.
2. Investigation

Weeds, cost of producing clean seed.
3. Weed survey.
4. Laboratory work—analytical.
5. Inspection.

Zoology and Entomology

1. A study of clover aphid and methods for its control.

Aberdeen Substation

L. C. Aicher

- Irrigation and dry-farm investigations with cereals, forage crops, potatoes and corn.

Caldwell Substation

C. M. Eklof

1. Dairy herd management
2. Hogging-off experiments.
3. Forage crops and grains.

High Altitude Substation at Felt

W. A. Moss

- Experiments with varieties and with cultural methods for grain and forage crop production under both dry farming and irrigation at an altitude in excess of 6000 feet.

Jerome Substation

Geo. Dewey

1. Potato disease investigations.
2. Potato cultural methods.

Sandpoint Substation

F. H. Lafranz, Supt.

1. Clearing land—hogging-off work.
2. Cereals and forage crops.

Hatch Projects Yield Results

Significant and highly valuable results have been secured in carrying on these projects during the past two years. Information not heretofore available has been secured with reference to productive factors in several breeds of sheep, with special regard to the effects of milk yields on the growth of lambs. New silage crops have been successfully grown and fed to livestock, and valuable information secured by station chemists with reference to the development of acids in something like 15 different silage crops and silage crops mixtures. The variety and cultural tests with field peas and variety tests of corn of the Farm Crops Department have been especially successful. Under conditions quite similar to the open field a yield of 84 bushels per acre was obtained with a particular variety of field corn, Rusler's White Dent. Calls for seed of this corn come from a wide territory.

The horticultural experiments in vegetable gardening and in evaporation and canning have been of immense practical benefit in the conservation campaign of the past eighteen months. The Department of Poultry Husbandry has clearly shown that animal protein in some form is necessary for profitable egg production. The addi-

tion of sour milk to a vegetable protein ration resulted in increased egg production, something like 1000%. The soil rotation and fertilizer experiments have indicated the possibility of an increase of six to eight bushels of wheat per acre in the Palouse farming sections by the application of sodium nitrate. All of the work mentioned above was supported by the Hatch Fund, which consists of an annual appropriation from the U. S. Treasury of \$15,000, to be expended with the approval of the Federal Office of Experiment Stations.

Adams Fund Results

The Adams Fund, a federal appropriation of the same amount as with the Hatch, by the terms of the bill making the grant is used for carefully outlined investigations of a fundamental scientific nature. Substantial progress has been made on the projects heretofore listed. A report in bulletin form is nearing completion on the investigation of the relation of soil nitrate to nodule formation. A number of trees in the apple breeding experiment are now bearing fruit. The newly accepted project in cytological studies promises valuable scientific information with reference to the problems of heredity.

Other Projects

The University-made culture for the inoculation of peas, beans, clover and alfalfa has been wonderfully popular. A sufficient price per acre has been charged, 25c during 1918, to cover the cost of material and labor, except the supervision of the trained bacteriologist in charge.

The following table shows the kinds of culture and amount on the acreage basis for the biennium:

<i>Kind</i>	<i>1917</i>	<i>1918</i>	<i>Total</i>
Peas	11272 acres	7482 acres	18754 acres
Beans	4187	3150	7337
Alfalfa	2926	2585	5511
Clover	2250	1745	3995
	<hr/> 20635	<hr/> 14962	<hr/> 35597

The tested trees of the School of Forestry are increasingly popular. The special appropriation for insect pests has been entirely expended in studying the clover aphid and testing methods for controlling it. A bulletin reporting highly valuable information in regard to successful control measures will be ready for public distribution prior to the first of the year.

Substation Farms

The Substation Farms, with the exception of those at Aberdeen and Jerome, have had inadequate support. The Aberdeen Farm is supported jointly by state and federal funds, and the Jerome Station entirely by federal funds. The present arrangement at Jerome results in strict federal management. Recommendation for a change is found

elsewhere. The Aberdeen Station is becoming an influential factor in agricultural development methods in southeastern Idaho. After certain revision of plans and land improvement, the stations at Caldwell and Sandpoint may well be expected to wield a similar helpful influence. Much is hoped in the way of interesting and highly valuable information from the new High Altitude Station in Teton County.

Changes in Staff

As a result of war measures, numerous changes have taken place in the station staff. There have been eleven resignations, four leaves of absence for the period of the war, and nine new appointments.

Publications

Members of the Experiment Station staff have contributed numerous articles of a popular nature to the University News Letter and to various agricultural and technical journals. These contributions, together with the bulletins and circulars of the Station, were important in connection with the food production and conservation campaign.

A list of Station publications follows:

- Bulletin 93. Experiments with Small Grains under Irrigation, Welch, 1917.
- Bulletin 94. Experiments with Legume Crops under Irrigation, Welch, 1917.
- Bulletin 95. The Management of Irrigated Grass Pastures, Welch, 1917.
- Bulletin 96. The Management of Farm Flocks in Idaho, Vincent, 1917.
- Bulletin 97. Commercial Onion Culture in Idaho, Vincent, 1917.
- Bulletin 98. Winter versus Summer Pruning of Apple Trees, Vincent, 1917.
- Bulletin 99. Experiments in the Irrigation of Apple Orchards, Taylor, Downing, 1917.
- Bulletin 100. The Production of Clover Seed under Irrigation in Southern Idaho, Aicher, 1917.
- Bulletin 101. The Production of Alfalfa Seed in Southern Idaho, Aicher, 1917.
- Bulletin 102. The Management of Dairy Herds, Ellington, 1917.
- Circular 4. Forest and Shade Trees and Basket Willows Recommended for Planting in Idaho, Shattuck, 1917.
- Bulletin 103. Performance Records of Some Eastern Wheats in Idaho, Jones, Colver, 1918.
- Bulletin 104. Annual Report for Year 1917, Jones.
- Bulletin 105. Trees, What, Where, When and How to Plant, Shattuck, Cook, 1918.
- Bulletin 106. The Home Garden in Idaho, Edmundson, Welch, 1918.
- Bulletin 107. Soils of Latah County, Idaho, Peterson, 1918.
- Bulletin 108. Sprays for the Control of San Jose Scale, Edmundson, 1918.

- Bulletin 109. The Protein Content of Wheat under Irrigation, Dec. 1918.
- Bulletin 110. Drying and Serving Fruits and Vegetables in the Home, Vincent, Hoover, 1918.
- Bulletin 111. Power Farming in Idaho, Wooley, 1918.
- Bulletin 112. A Study of Clover Aphis and Methods for its Control. Smith, 1918.
- Bulletin 113. Annual Report for Year ending Dec. 31, 1918.
- Circular 4. Tested Forest Trees for Planting in Idaho, Miller, 1918.
- Circular 5. Idaho Spray Calendar, Vincent, Willis, 1918.
- Journal of Agricultural Research, Vol. XII, No. 4:
Influence of Nitrates on Nitrogen Assimilating Bacteria, Hills.
Reprints furnished for Idaho Experiment Station.
- Journal of Agricultural Research, Vol. XIV, No. 10:
Acidity of Silage Made from Various Crops, Neidig.
Reprints furnished for Idaho Experiment Station.

ADMINISTRATION

The requests for publications will scarcely suffice to take care of those needed. The University News Letter now reaches about 9000 people in Idaho. By the end of another year it is planned to have it reach several thousand additional Idaho residents. This will require additional filing cabinets, name plates, and other addressing and mailing equipment. Two typewriters now in use are no longer in good repair. An item of \$200 is found in the budget for the replacement of these machines. For efficiency in the preparation of bulletin and report manuscripts, it is proposed to purchase two long-carriage machines.

AGRICULTURAL CHEMISTRY

The Department of Agricultural Chemistry formerly employed four men. There are now but two people employed in the department, and there has been authorized for some time the employment of an Associate Chemist. It is planned to defer such an appointment until March 1, and provision is made to this effect in the budget.

BACTERIOLOGY

A substantial increase in requested in Bacteriology. This is primarily for investigation. In the study of the inoculation of legumes, Dr. Paul Emerson proposes to extend the work, carrying some of it under greenhouse rather than under the restricted conditions in one corner of the laboratory.

FARM CROPS

In Farm Crops there is an increased request for funds, and the importance of the Farm Crops work in Idaho thoroly justifies adequate support of this department. Professor Bonnet of this department desires to do some cooperative work with the farmers in various sections of the state which will cost additional money.

PLANT DISEASES

Requests will be noted for Plant Physiology and Plant Pathology. The first named work will be handled by Professor V. H. Young, of the Department of Botany, for the most part during the summer vacation. The plant disease situation with reference to potatoes, wheats, and other cereals, and orchard and garden crops of this State, is of such importance that it is deemed necessary to employ a plant pathologist.

LIBRARY FACILITIES

The burning of the Administration Building several years ago destroyed the early files of bulletins, and new files have been assembled only after the exercise of patience and perseverance in trying to replace lost material. At the present time the bulletins, reports, and other library material of interest to agricultural instructors and to research men in Agriculture is not in shape that it can be used to the best advantage. It will require the time of one person for an entire year to properly index and assemble the library pertaining particularly to agriculture. I have not made a separate request for this, since I take it that the needs of the library should be set forth as a unit rather than by colleges. It is highly important that sufficient help be provided in the library so that one worker can be assigned to that portion of the library, especially bulletins and reports, of particular interest to the Agricultural College and Experiment Station, and that liberal provision be made for binding, in order that much of this material may be put in a more permanent form.

SANDPOINT FARM

This farm will in time be able to provide a much larger share of its own support. There is need of additional clearing and of considerable development work. I am quoting the recommendations of Superintendent F. H. Lafrenz, which are approved:

"Relative to the budget for the coming biennium, I feel that to get the farm in shape so that it can accomplish its purpose we must have more stock, more land cleared, more equipment, and more buildings, which will make it necessary to ask for an appropriation of \$10,000, in addition to the net income, \$12,000."

CALDWELL FARM

The Caldwell farm has never been entirely satisfactory. First of all, not enough of the total 320 acres has been reclaimed from sagebrush. Second, the general plans for handling the farm have not been well adapted to the region.

First of all, there must be acquired a permanent water right for the farm, which will cost \$21,724.08. Of this amount, \$2700 must of necessity be paid during the coming biennium. Already plans have been made for leasing 80 acres of the farm under such terms as will return the land to us levelled and in alfalfa at the end of the fourth

year. The remainder of the farm it is proposed to handle in two ways: first, a unit of from 80 to 120 acres will be set aside as a diversified farm. Such acreage in various crops and such livestock will be kept on the farm as would typify the best farm management of the Boise Valley region. The remainder of the farm should be kept in alfalfa or in alfalfa and grain, and made to furnish feed for an experimental feeding plant, which will be discussed later. The amount requested for support of the farm during the 1919-20 biennium is \$13,500.

ABERDEEN FARM

It is proposed during the coming year to turn the entire farm at Aberdeen into an irrigated experimental farm. This means the handling under irrigation of something like 75 acres, exclusive of building sites and yards, as compared with 26 formerly under irrigation. The Aberdeen Station has been doing some splendid work, and is beginning to exercise a decided influence on the farming practices in southeastern Idaho. Superintendent Aicher's request of \$6000 for the support of the Station is regarded as modest.

JEROME FARM

The Experiment Farm at Jerome, consisting of 40 acres, was provided by the business men interested in the upbuilding of the irrigated country contiguous to Jerome, and the buildings were erected by special state appropriation. The farm has been leased for \$1.00 per year to the U. S. Department of Agriculture, and thru the Bureau of Plant Industry the farm has been handled as a station for the investigation of the problems of potato production.

HIGH ALTITUDE STATION

Numerous difficulties have been met with in selecting a site for the High Altitude Experiment Farm, but as now located the station consists of 160 acres of dry farming land and 40 acres of irrigated land. A contract for material and arrangements for construction have just been made, providing for the erection of a cottage on the 40 acres of irrigated land. This will be made the headquarters, and the dry farming land will be handled in connection. The irrigated land is within three-quarters of a mile of the postoffice of the town of Felt. The needs are estimated at \$7000. The field for doing interesting and highly valuable work at Felt has been called to the attention of the Office of Cereal Investigations of the U. S. Department of Agriculture, and negotiations have been undertaken already with this office with the purpose of obtaining federal aid for the work at Felt in a similar manner to the plans that prevail at Aberdeen.

INSECT PESTS

Four thousand dollars was provided by the 1917 legislature especially for insect pest investigations and control, and has been expended

entirely in work with the clover aphid. Such progress has been made in methods for aphid control that it seems possible to entirely control this pest, which in some districts in southern Idaho has almost entirely destroyed the profitable industry of clover seed production. In order that this work may be completed and other important work undertaken, an appropriation of \$6000 is requested for the coming biennium.

SOIL SURVEY

Dr. P. P. Peterson of the Department of Soils has submitted to you separately a report of this year's work done with the \$1200 appropriated for soil survey. Last year's work was done in northern Idaho in a similar way to the work done in southeastern Idaho this year. For the coming biennium \$2000 is asked. The U. S. Bureau of Soils contributes funds when State funds are provided.

STATE FUNDS FOR EXPERIMENT STATION

With the exception of occasional appropriations for such special work as soil survey, insect pest control and other similar special enactments, there has been no state support for the work of the Idaho Experiment Station. With no other support than the Hatch and Adams funds mentioned before, it is impossible for the Idaho Experiment Station to do the work that should be done in Idaho, and to serve the agricultural needs of the state in handling a large number of problems that concern the agricultural development and future prosperity of the farming population.

A request is made, therefore, for a sum of \$30,000 for the biennium, to be expended entirely for experimental work in agriculture—this sum to be known as the Hatch Fund Offset. This money will supplement in a large number of directions the work of the Hatch Fund, and particularly will enable the work of the Station to be much more valuable to the State as a whole. It may be of interest to say just a word in regard to some of the things that might be done with this money. A matter of prime consideration is the employment of an experienced and trained man for experimental work in Animal Husbandry and the use of a portion of the proposed state appropriation for the development of a feeding station on the Experiment Farm at Caldwell. The feeding problems, particularly those of southern Idaho, are complicated, and the Idaho Experiment Station is not in possession of information that will enable it to answer many of the ordinary inquiries that come to us. The problem of providing a satisfactory method of using our great yields of alfalfa hay is alone of sufficient importance to justify the appropriation of the entire amount requested.

SERVICE

The agricultural resources of Idaho are of vast extent and importance. Much has been done in the way of development and utilization, but in all probability greater accomplishments are still to come. Sci-

ence is to have the largest role in solving problems of soil fertility, plant and animal breeding, animal feeding, crop production, insect pests and plant diseases, distribution of farm products, and economy, convenience and comfort on the farm and in the home. The aim of the Idaho Experiment Station will be to more and more directly serve the needs of the State along the lines indicated.

To ascertain the needs of the people, a questionnaire has been distributed to County Agents and other Extension workers, and to representative farmers in various parts of the State. Those who receive the questionnaire are asked to indicate a list of problems that might be undertaken by the Station and to offer suggestions in regard to how the work of the Station may be made more immediately useful in the State's agricultural progress and up-building.

There is a close correlation in the functions of investigation, instruction, and extension. The Experiment Station is foundational to success in the two closely related lines of work. Information secured by station workers is given to students by the instructional staff at Moscow, and carried by Extension workers from the headquarters at Boise to the most remote sections of Idaho.

Respectfully submitted,

E. J. IDDINGS,
Dean and Director.

DIRECTOR OF THE AGRICULTURAL EXTENSION
DEPARTMENT

(To be printed later in separate Bulletin.)

FINANCIAL STATEMENT, UNIVERSITY OF IDAHO EXTENSION DIVISION, JANUARY 1, 1917, TO DECEMBER 1, 1918

Sources of Funds

State appropriation	\$52,449.52	
Amount used to complete State offset to Smith-Lever increase and accounted for under "Offset Smith-Lever" .....	.25	
Amount disbursed to December 1		\$52,449.27
Offset Smith-Lever		
Local funds	\$19,430.00	
From State appropriation .....	.25	
Total offset		\$19,430.25
Federal Smith-Lever		
January 1, 1917-June 30, 1917	\$10,474.71	
July 1, 1917-June 30, 1918	18,290.24	
July 1, 1918-December 1, 1918	6,855.70	
Total disbursed Dec. 1, 1918		\$35,620.65
Total funds expended by Agricultural Extension Division of the University of Idaho to December 1, 1918		\$107,500.17
Unexpended balance (Federal Smith-Lever appropriation)		959.83
Total appropriation biennium 1917-1918		\$108,460.00

DSBURSEMENTS BY PROJECTS

Projects	State Funds		Federal Funds Smith-Lever	Totals
	Appropriation	Offset Smith-Lever		
Administration	\$14,486.86	\$ 2,850.13	\$ 7,835.37	\$ 25,172.36
County Agents	9,312.20	10,605.46	13,855.82	33,773.48
Home Economics	7,166.99	1,774.57	3,945.05	12,886.61
Dairy Extension	2,419.57	100.00	706.41	3,225.98
Printing	236.09	300.00	1,162.00	1,698.09
Boys' and Girls' Clubs	9,955.47	1,731.44	2,595.04	14,281.95
Horticulture	3,528.81	1,170.63	2,137.44	6,836.88
Animal Husbandry	748.84	557.87	1,641.11	2,947.82
Extension Schools	2,858.31	70.15	1,173.00	4,101.46
Entomology	27.75			27.75
Agronomy	1,223.65	150.00	476.01	1,849.66
Soils	382.28	120.00	93.40	595.68
Rodent control	102.45			102.45
Totals	\$52,449.27	\$19,430.25	\$35,620.65	\$107,500.17

DISBURSEMENTS BY EXPENSE CLASSIFICATION

Classification	State Funds		Federal Funds Smith-Lever	Totals
	Appropriation	Offset Smith-Lever		
Salaries.....	\$26,790.76	\$16,399.04	\$19,356.76	\$ 62,546.56
Labor.....	1,627.82	302.50	819.69	2,750.01
Publications.....	236.09	300.00	1,162.00	1,698.09
Stationery and small printing.....	1,456.43	549.00	1,536.21	3,541.64
Postage, telegraph and telephone, freight and express.....	2,126.63	204.47	612.15	2,943.25
Heat, light and power.....	1.25	.....	4.25	5.50
Supplies.....	410.41	11.45	259.46	681.32
Library.....	122.24	.....	95.32	217.56
Tools and machinery.....	188.34	1.35	198.97	388.66
Furniture and fixtures.....	2,453.86	234.47	1,510.85	4,199.18
Scientific apparatus.....	399.00	27.35	285.68	712.03
Travel.....	13,799.74	1,397.62	9,736.71	24,934.07
Contingent.....	2,836.70	3.00	42.60	2,882.30
Totals.....	\$52,449.27	\$19,430.25	\$35,620.65	\$107,500.17

EXTENSION DIVISION, UNIVERSITY OF IDAHO
BUDGET OF NEEDS, BIENNIUM 1919-20

Project

1. Administration	\$ 42,870.00
2. County Agents	100,150.00
3. Home economics	67,245.00
4. Boys' and Girls' Clubs.....	73,580.00
5. Horticulture	7,920.00
6. Entomology	5,520.00
7. Animal husbandry	8,940.00
8. Extension Schools	13,000.00
9. Publications	6,600.00
10. Pure seed	2,780.00
11. Dairying	11,590.00
12. Agronomy	11,800.00
13. Soils	4,115.00
14. Reserve	4,906.56
15. Rodent control	600.00
16. Farm help specialist.....	600.00

Total.....\$362,216.56
Reduction, State Board of Education..... 75,273.28

Balance\$286,943.28
Less Federal Smith-Lever..... 46,943.28

To be appropriated.....\$240,000.00

VOCATIONAL SECTION, S. A. T. C.
First Contingent

To the President:

In the spring of 1918 the University was requested to assist in the training of soldiers along special vocational lines. A study of the situation showed that while the shops were sufficient in size and fairly well equipped for handling students in small groups, it was not advisable to take more than one hundred men in the first contingent. These men arrived in Moscow June 15th. They were all Idaho men and every county in Idaho was represented. Men, not of draft age, who already had more or less training, volunteered for this special war work. They were divided according to previous training into five groups as follows: 40 radio operators, 20 auto mechanics, 20 general mechanics, 10 carpenters, and 10 blacksmiths.

They were quartered in Lewis Court, one of the first jobs of the carpenters being the laying of a floor in this building. Mess was served in the girls' dormitory, and the work was soon under way. Courses had been outlined in detail and approved by the Committee on Education and Special Training at Washington. This training, which lasted two months, was on a wholly different basis than regular college work, consisting of not more than thirty minutes per day given to lectures or recitation and at least five and one-half hours per day of actual shop practice. Two hours were spent in military practice and one hour each afternoon was given to recreation in addition to Saturday afternoons. One hour each evening was set aside as a study hour. The students entered into the work with an eagerness to learn as much as possible in the short time. The more capable were put in charge of small squads of men and given a chance to show leadership. Four from this group were sent to Officers' Training Camps. The results of this training were most satisfactory, the instructors without exception being enthusiastic over the interest taken in the work and the results obtained. The Military Department showed the greatest possible interest in the work and cooperated in every way with the University authorities. Too much credit cannot be given to the commanding officer, Captain George W. Edgington, of Idaho Falls, and his capable assistants, Dr. Frank Kotalik, Lieutenants E. B. Hanna and J. A. Kimball.

The men completed their training on the 14th of August, were each rated by at least three different instructors as apprentices, journeymen or experts, and transferred to other camps. From the 100 men in the first contingent there were no failures, every man being sent out with a rating such as to place him in the army doing his selected work.

Second Contingent

From the first contingent five men were selected to serve as instructors in the second contingent of 102 men who arrived August 15th. This group was divided into the same five groups, there being, however, 40 auto mechanics and only 20 radio operators.

While this contingent was here it was decided to prepare for a larger number of men from October 15th to June 15th. An additional building, for auto mechanics, 40 x 40 feet and two stories high, was built by the carpenter group. Later, information was received that the Student Army Training Corps was to be fed and housed at the University so a mess hall for 600 was constructed. This was built in the form of an H, the kitchen in the center being 30 x 30 feet, and each building was considered an emergency, work was rushed and meals were served one week after starting the structure.

It seemed to be impossible to care for the vocational men on the Campus so the plant of the Idaho National Harvester was taken over. One building was equipped as a mess hall. Barracks were secured by taking over a large brick livery barn which was completely overhauled by the men in the second contingent. New floors were laid on the first two stories and the basement was made into a toilet and washroom with cement floor. These barracks were not sufficient, however, and small barracks, 20 x 120 feet long, were erected on the lot adjoining. This building was completed in two days by the second contingent.

Third Contingent

On October 15th the Third Contingent arrived and work was begun soon after this date. The shops were placed in order. A building was constructed for the work in radio operation and another remodeled for carpentry and blacksmithing. There were 295 men in the contingent including 20 men held over from the Second Contingent as soldier instructors. Of these about 100 came from Wyoming and the remainder from Idaho.

Very considerable interference with the work was produced by the Spanish influenza epidemic which was the cause of all deaths. Great commendation is due to Captain Luther Felker and Dr. Kotalik for their cooperation with the University in this trying time.

After a study of the training given in these short periods and the interest of the students in their work it seems to me that short courses in vocational training of men might well become a permanent part of the University curriculum. In these courses entrance requirements need not be rigid and very little time should be spent on theory. Small classes should be under competent instructors and the students would learn while actually getting the practice.

Very respectfully submitted,

M. F. ANGELL,
Director Soldier Training, Section B.

UNIVERSITY OF IDAHO
CONSOLIDATED CASH STATEMENT JANUARY 1, 1917, TO
DECEMBER 1, 1918

Income:

Appropriation	\$648,860.00
Buildings and betterment.....	112,000.00
Pure seed appropriation.....	10,000.00
Balance 1915-16 appropriation Jan. 1, 1917.....	3,170.89
Balance of Federal moneys Jan. 1, 1917.....	4,810.80
Balance of old bond issue, 1907.....	75.65
Free balance February 1, 1917.....	40,698.08
Income allowed by State Board of Examiners..	20,812.82
Mining cooperative trust fund.....	3,309.36
Total.....	\$843,737.60

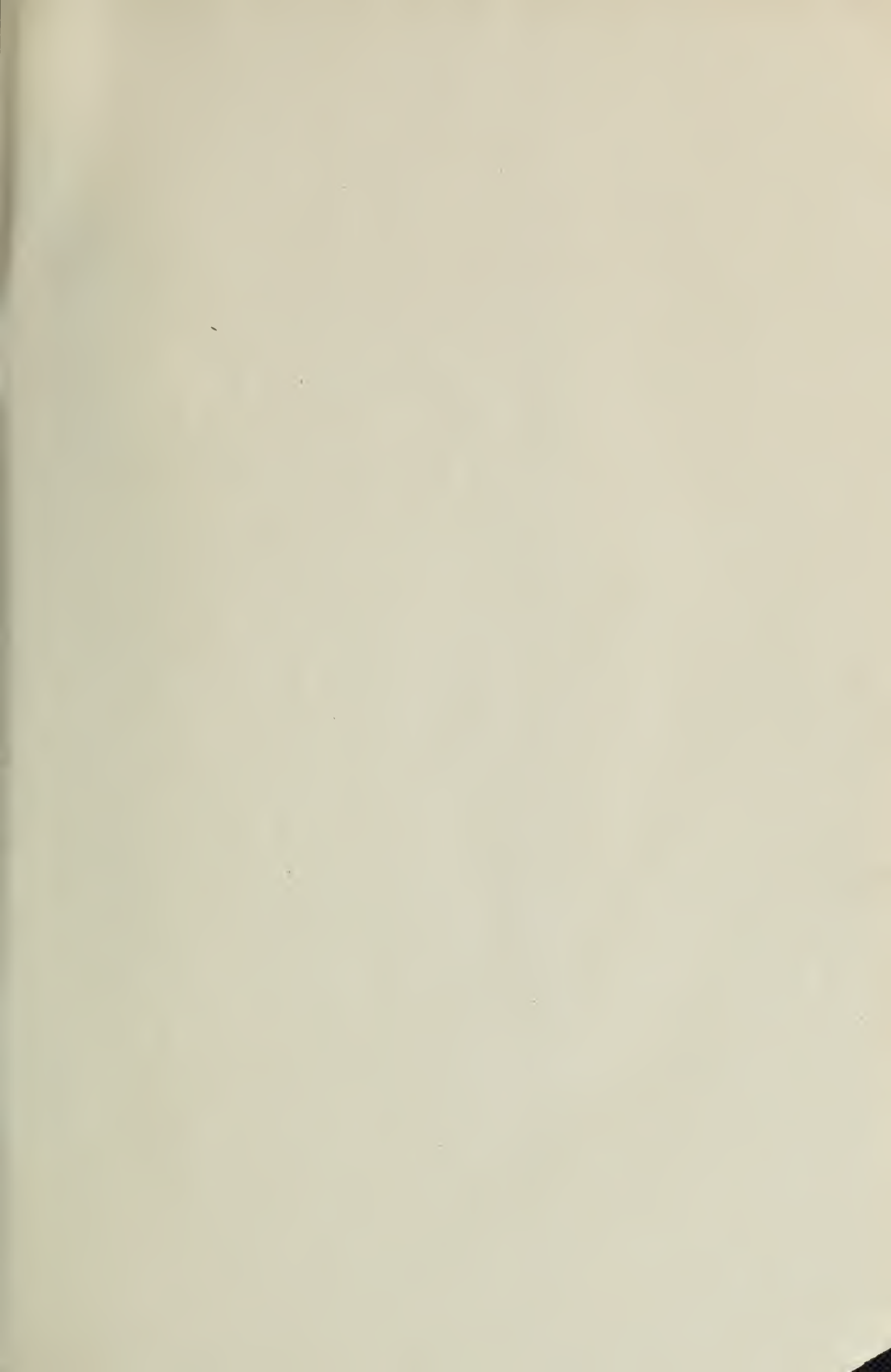
Expenditures:

College of Letters and Science.....	\$154,074.05
College of Agriculture	140,928.06
College of Engineering	24,554.80
College of Law	13,185.16
School of Mines	22,447.01
School of Forestry	13,960.28
Agricultural Extension	107,767.58
Experiment Substations	29,996.08
Administration	40,616.41
Special appropriations	29,180.75
General	84,600.19
Buildings	89,932.38
Total.....	\$751,242.75
Balance December 1, 1918.....	\$ 92,494.85

UNIVERSITY OF IDAHO
BUDGET OF NEEDS FOR 1919-1920

I. Maintenance (including)	\$722,988.00
College of Letters	\$217,668.00
College of Agriculture	175,290.00
College of Engineering	33,335.00
School of Forestry	18,220.00
College of Law.....	15,420.00
School of Mines.....	19,765.00
Summer School	10,000.00
Administration	53,225.00
General expenditures	33,200.00

Operation and repairs.....	88,865.00	
Experiment Station	58,000.00	
		<hr/>
II. Capital Additions—Buildings		74,361.00
		<hr/>
Total.....		\$797,349.00
Less—		
Federal Appropriation	\$160,000.00	
Federal Endowment	206,000.00	
Local income (not including Ex. Sta.) ..	40,000.00	
		<hr/>
		406,000.00
		<hr/>
Recommended by Board for legislative ap- propriation		\$391,349.00
III. Extension in Agriculture and Home Econ- omies	\$286,943.28	
Less Smith-Lever Federal Fund.....	46,943.28	
		<hr/>
Recommended by Board for legislative ap- propriation		240,000.00
		<hr/>
Grand Total		\$631,349.00









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